

Headquarters Electronic Systems Center

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SAFE Gate Technology Project



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OVERVIEW

- **Project Background**
- **Spiral I Project Capabilities**
- **Spiral II Upgrades**



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PROJECT BACKGROUND

- **Sep 11 dictated need for new way of doing business**



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PROJECT BACKGROUND

CONT.



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PROJECT BACKGROUND ***CONT.***



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PROJECT BACKGROUND CONT.

- **AF installations world-wide settled into Force Protection Condition B+ as new norm**

- **What is B+?**
 - **ID the driver only**



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PROJECT BACKGROUND CONT.

- **Security Forces Requirements**
 - **Verify and validate identity of incoming authorized personnel and block attempts of unauthorized vehicle/pedestrian entry**
 - **Through put issues**
 - **Operational availability of 98% including scheduled maintenance**
 - **Operate in severe weather and require only limited manual intervention**
 - **Operate in NBC**
 - **Annunciate all alarms concerning individuals/vehicles attempting unauthorized entry to entry controller and control centers**
 - **Incorporate explosive materiel search technologies for personnel/vehicles prior to entry**
 - **Accommodate visiting personnel/vehicles**



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PROJECT BACKGROUND CONT.

- **Security Forces Requirements Cont.**
 - **Support SF overwatch to ensure immediate, armed response capability**
 - **Conduct video surveillance and storage for incident reporting with backup storage for min of 48 hours**
 - **Automatically receive/verify commercial delivery notifications**
 - **Safely lockdown in/out bound traffic**
 - **Perform remote monitoring/lockdown of all SAFE equipped ECPs at SF Control Center**
 - **Secure data entry, storage, and retrieval**
 - **Modular and scalable**
 - **Anti-tamper features and technology protection**
 - **Operate with minimal sustainment and maintenance requirements**



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PROJECT BACKGROUND CONT.

- **What is 100% ID?**
 - **According to Sandia report the probability of detection using current operation of visual ID check is only 20%**

- **SAFE in present form is not the 100% solution**
 - **It requires the customer/user to accept some level of risk**

- **Personnel Identification Credential System (PICS)**

- **Database challenge**



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SPIRAL / CAPABILITIES

■ **S**ecure

■ **A**utomated

■ **F**ast

■ **E**ntry



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SPIRAL / CAPABILITIES CONT.



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SPIRAL / CAPABILITIES CONT.

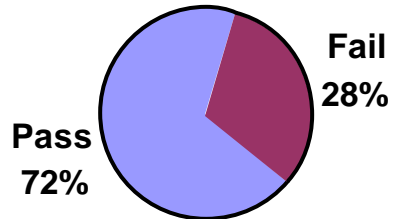


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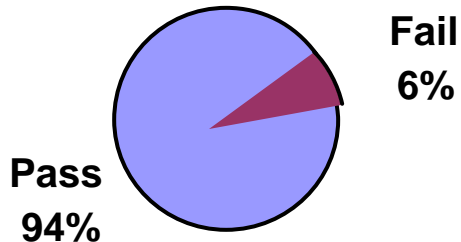


SPIRAL / CAPABILITIES CONT.

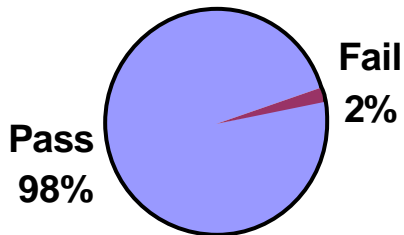
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- **LPR**
 - 415 passes
 - 161 false rejects



- **PID**
 - 542 passes
 - 34 false rejects



- **Card Reader**
 - 564 passes
 - 12 false rejects



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SPIRAL / CAPABILITIES CONT.

- System does not remove human entry controller from the picture
- Installed off-line at Hanscom AFB MA



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SPIRAL II UPGRADES

- Upgrade stand alone Advantor system with fully integrated, networkable, NT based system, using SQL database
- Replace current ID barcode reader with multi angle reader
- Non-removable passive ID tag will replace current tag
- Incorporate/test vehicle-disabling device
- Incorporate government owned visitor control software program



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SPIRAL II UPGRADES CONT.

- **Incorporate audio alerting system**
- **Incorporate third party converter to read DoD Common Access Card and visitor access cards**
- **Install light system that allows for greater luminance for daytime viewing**
- **Light tree will now include yellow light to alert entry controllers of visitors**



SUMMARY

- **Events of Sept 11 dictated a paradigm shift in security business**
- **Non-material solutions have been exhausted**
 - **Must use technology to help solve security and throughput requirements and issues**
- **We do not have the 100% solution with COTS products and technology**
 - **Our system is designed to be modular and scaleable to incorporate technology solutions as they mature**
 - **SAFE must be part of an engineering design and procedures to implement**
- **SAFE is a viable solution**
 - **Along with vulnerability, cost, and systems effectiveness studies commanders can be well informed as to how to operationalize SAFE or components of SAFE and integrate it into their entire base defense plan**